

SEP 26 2006

DOCKET NO. PRES06-00181  
SERIAL NO. 10/080,877  
PATENT**IN THE CLAIMS**

Please amend the claims as follows.

Claims 1-9 (Cancelled).

10. (Previously Presented) A surgical tool for making an incision in scleral tissue of an eye, comprising:

a surgical blade capable of being moved by the surgical tool through the scleral tissue of the eye to make an incision, the incision having the form of a scleral pocket that is capable of receiving a scleral prosthesis;

a base housing comprising a first drive shaft and a drive motor capable of providing bidirectional rotational motion to the first drive shaft;

a drive shaft housing comprising a second drive shaft coupled to the first drive shaft;

a blade mount housing comprising a third drive shaft coupled to the second drive shaft, the blade mount housing being mounted on the drive shaft housing at an angle with respect to a central axis of the drive shaft housing, wherein the surgical blade comprises (i) a rotatable support arm coupled to the third drive shaft and (ii) a curved cutting blade coupled to the rotatable support arm; and

a blade guide mounted on said blade mount housing, said blade guide having portions that form a circularly shaped surface that is concentric with said curved cutting blade but having a radius less than a radius of said curved cutting blade, so that said curved cutting blade passes

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over said circularly shaped surface of said blade guide when said support arm rotates said curved cutting blade in a forward direction.

11. (Currently Amended) A surgical tool as claimed in Claim 10 wherein a distance between said circularly shaped surface of said blade guide and said curved cutting blade when said support arm rotates said curved cutting blade in [[a]] the forward direction over said circularly shaped surface of said blade guide is approximately four hundred microns.

12. (Original) A surgical tool as claimed in Claim 10 wherein said blade guide comprises portions that form a forward motion safety stop for stopping a forward motion of said curved cutting blade.

13. (Previously Presented) A surgical tool as claimed in Claim 10 wherein said blade guide comprises:

a first end portion that forms a first blade slot on a first end of said blade guide; and  
a second end portion that forms a second blade slot on a second end of said blade guide;  
wherein said first blade slot and said second blade slot are capable of slidably receiving said curved cutting blade when said support arm rotates said curved cutting blade over said circularly shaped surface of said blade guide.

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14. (Currently Amended) A surgical tool as claimed in Claim 10 wherein said blade guide comprises:

a pressure sensor capable of determining a measurement of pressure between said circularly curved shaped surface of said blade guide and a surface of said scleral tissue when said circularly curved shaped surface of said blade guide is placed into contact with said surface of said scleral tissue; and

a signal line coupling said pressure sensor to a surgical tool controller to provide said measurement of pressure to said surgical tool controller.

15. (Original) A surgical tool as claimed in Claim 14 wherein said surgical tool controller sends a control signal to said surgical tool disabling bidirectional rotational motion of said surgical blade when said measurement of pressure from said pressure sensor of said blade guide does not exceed a selected pressure level.

16. (Currently Amended) A surgical tool as claimed in Claim 10 further comprising means for holding said scleral tissue against said circularly curved shaped surface of said blade guide when said curved cutting blade makes [[an]] the incision in said scleral tissue.

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17. (Currently Amended) A surgical tool as claimed in Claim 16 wherein said means for holding said scleral tissue against said circularly curved shaped surface of said blade guide when said curved cutting blade makes [[an]] the incision in said scleral tissue comprises a scleral tissue fixation tool.

18. (Original) A surgical tool as claimed in Claim 17 wherein said scleral tissue fixation tool comprises:

a shaft; and  
at least one fixation barb affixed to an end of said shaft, said at least one fixation barb capable of holding said scleral tissue when said fixation barb is rotated into engagement with said scleral tissue.

19. (Currently Amended) A surgical tool as claimed in Claim 17 wherein said means for holding said scleral tissue against said circularly curved shaped surface of said blade guide when said curved cutting blade makes [[an]] the incision in said scleral tissue comprises a vacuum.

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20. (Previously Presented) A surgical tool as claimed in Claim 10 wherein:  
said blade guide comprises portions that form a vacuum chamber within an interior of  
said blade guide, portions that form a plurality of access ports between said vacuum chamber and  
said circularly shaped surface, and portions that form a vacuum coupling that is capable of being  
coupled to a vacuum supply line.

21. (Currently Amended) A surgical tool as claimed in Claim 20 wherein said  
blade guide holds said scleral tissue against said circularly curved shaped surface of said blade  
guide when said curved cutting blade makes [[an]] the incision in said scleral tissue by applying  
a vacuum to said scleral tissue through said plurality of access ports.

Claims 22-64 (Cancelled).

65. (Previously Presented) The surgical tool of Claim 10, wherein the second  
end of the cutting blade is operable to be moved through an anterior surface of the scleral tissue  
of the eye without passing through a posterior surface of the scleral tissue of the eye to make the  
incision.

Claims 66-68 (Cancelled).